

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer program product tangibly embodied in a computer-readable storage medium, ~~for navigating user interface elements of a computer program application,~~ the product comprising instructions operable to cause a data processing apparatus to execute a method for navigating user interface elements on a display screen[:];
the interface elements being arranged in order into user interface element groups having assigned group identifier characters; and
the interface elements indicating, on the display screen, an element currently having focus to receive user input; the method comprising:

detect detecting a user navigation input comprising one of key press of a navigation key, the navigation key having a group identifier, the navigation key being a forward user navigation input key or a backward user navigation input key, the forward user navigation input comprises a forward modifier key press combined with a key press of a first group identifier character, and the backward user navigation input comprises a backward modifier key press combined with a key press of a second group identifier character;

~~identify~~ identifying a selected group of user interface elements associated
with the first or second group identifier character; and

~~shift~~ shifting input focus to a user interface element in the selected group
based on the user navigation input key,

wherein, when the user navigation input key is detected pressed, :

determining a current group ~~and a target group of user-~~
~~interface elements is determined,~~ that contains the
interface element currently having input focus, and
determining a target group that corresponds to the group
identifier key press;

wherein when the user navigation input key is the forward user navigation
input key, :

input focus is shifted to ~~a next user~~ an interface element next
in order in the current group if the current group is the
same as the target group, or

input focus is shifted to a first ~~user~~ interface element in the
target group if the current group is not the same as
the target group, and

wherein when the user navigation input key is the backward user
navigation input key,;

input focus is shifted to a ~~previous user~~ an interface element
previous in order in the current group if the current
group is the same as the target group, or

input focus is shifted to a ~~last user~~ an interface element last
in order in the target group if the current group is not
the same as the target group.

2. (Canceled).

3. (Currently Amended) The product of claim 1, wherein the user
interface elements have associated text labels, and wherein the user
interface elements associated with the first or second group identifier character
are user interface elements having an associated text label with a first
character that matches the first or second group identifier character.

4. (Currently Amended) The product of claim 1, wherein a character
matches a group identifier character if both are the same character regardless of
character case.

5. (Currently Amended) The product of claim 1, wherein a character
matches a group identifier character if both are the same character in the same
case.

6. (Original) The product of claim 1, wherein the user interface elements have associated text labels, the product further comprising instructions to:

group the user interface elements into groups based on the first character of the associated text label of the elements at application run time.

7. (Original) The product of claim 6, wherein group instructions to group the user interface elements into groups based on the first character of the associated text label comprise instructions to:

group only the user interface elements in a current screen of the application into groups based on the first character of the associated text label.

8. (Currently Amended) The product of claim 1, wherein:
the forward user navigation input key is a combination of one or more forward modifier keys and the first group identifier character key;
and
the backward user navigation input key is a combination of one or more backward modifier keys and the second group identifier character key.

9. (Currently Amended) A computer program product tangibly embodied in a computer-readable storage medium, ~~for a software application having user interface elements~~, the product comprising instructions operable to cause a data processing apparatus to execute a method for navigating user interface elements on a display screen[[:]]; the interface elements being arranged in order into user interface element groups having assigned group identifier characters; and the interface elements indicating, on the display screen, an element currently having focus to receive user input; the method comprising:

~~detect~~ detecting a sequence of one or more user navigation inputs ~~key-presses of navigation keys, each navigation key having a group identifier, each user navigation input key being comprising one of a~~ forward user navigation input key or a backward user navigation input key, the forward user navigation input comprises a forward modifier key press combined with a key press of a first group identifier character, and the backward user navigation input comprises a backward modifier key press combined with a key press of a second group identifier character;

~~generate~~ generating a navigation string from the sequence of one or more ~~group identifiers~~ identifier characters for the one or more user navigation inputs keys; and

~~shift~~ shifting input focus to a user interface element identified by the

navigation string[[,]]:

wherein, when the user navigation input key is detected ~~pressed~~, :

determining a current group and ~~a target group of user~~

~~interface elements is determined~~, that contains the

interface element currently having input focus, and

determining a target group that corresponds to the group

identifier key press;

wherein when the user navigation input key is the forward user navigation

input key, :

input focus is shifted to ~~a next user~~ an interface element next

in order in the current group if the current group is the

same as the target group, or

input focus is shifted to a first ~~user~~ interface element in the

target group if the current group is not the same as

the target group, and

wherein when the user navigation input key is the backward user

navigation input key;

input focus is shifted to ~~a previous user~~ an interface element

previous in order in the current group if the current

group is the same as the target group, or

input focus is shifted to ~~a last user~~ an interface element last
in order in the target group if the current group is not
the same as the target group.

10. (Currently Amended) The product of claim 9, wherein instructions
to detect a sequence of one or more user navigation inputs ~~key presses~~
comprise instructions to:

detect a sequence of forward user navigation inputs ~~key presses~~, the
sequence having a first user navigation input ~~key press~~ and a last
user navigation input ~~key press~~;

initialize the navigation string when the first user navigation input ~~key~~
~~press~~ is detected;

start a time out interval with each forward user navigation input ~~key press~~;
and

determine the last user navigation input ~~key press~~ as the input ~~key press~~
after which no forward user navigation inputs ~~key presses~~ are
detected within the time out interval.

11. (Currently Amended) The product of claim 9, wherein instructions
to detect a sequence of one or more user navigation inputs ~~key presses~~
comprise instructions to:

detect a sequence of backward user navigation inputs ~~key presses~~, the
sequence having a first user navigation input ~~key press~~ and a last
user navigation input ~~key press~~;
initialize the navigation string when the first user navigation input ~~key~~
~~press~~ is detected;
start a time out interval with each backward user navigation input ~~key~~
~~press~~; and
determine the last user navigation input ~~key press~~ as the input ~~key press~~
after which no backward user navigation inputs ~~key presses~~ are
detected within the time out interval.

12. (Currently Amended) The product of claim 9, wherein the user
interface elements have an order, and instructions to shift input focus to a user
interface element comprise instructions to:

shift input focus to a next user interface element in order having a text
label starting with the same characters as the characters in the
navigation string, if the user navigation input ~~key~~ is ~~[[a]]~~ the forward
user navigation input ~~key~~; ~~and or~~
shift input focus to a previous user interface element in order having a text
label starting with the same characters as the characters in the
navigation string, if the user navigation input ~~key~~ is ~~[[a]]~~ the
backward user navigation input ~~key~~.

13. (Currently Amended) A computer program product tangibly embodied in a computer-readable storage medium, ~~for providing activation keys for user interface elements of a computer program application,~~ the product comprising instructions operable to cause a data processing apparatus to execute a method for navigating user interface elements on a display screen[:]; the interface elements being arranged in order into user interface element groups having assigned group identifier characters; and the interface elements indicating, on the display screen, an element currently having focus to receive user input; the method comprising:

~~detect~~ detecting an ensemble of sequential user activation inputs ~~key~~-presses, each user activation input ~~key~~ comprising a character, thereby detecting a sequence of characters, each user activation input ~~key~~ being comprising one of a forward user activation input ~~key or a backward~~ user activation input ~~key, the forward~~ user activation input comprises a forward activation modifier key press combined with a key press of a first group identifier character and the backward user activation input comprises a backward activation modifier key press combined with a key press of a second group identifier character key;

~~identify~~ identifying a matching activation user interface element by finding an activation user interface element having a label matching the sequence of characters; and

~~perform~~ performing an action associated with the matching activation user

interface element[[,]];

wherein, when the ~~navigation~~ user activation input key is detected

~~pressed~~, :

determining a current group and a ~~target group of user~~

~~interface elements is determined~~, that contains the

interface element currently having input focus, and

determining a target group that corresponds to the group

identifier key press;

wherein when the ~~navigation~~ user activation input key is the forward

~~navigation~~ user activation input key, :

input focus is shifted to a ~~next user~~ an interface element next

in order in the current group if the current group is the

same as the target group, or

input focus is shifted to a first ~~user~~ interface element in the

target group if the current group is not the same as

the target group, and

wherein when the ~~navigation~~ user activation input key is the backward

~~navigation~~ user activation input key,;

input focus is shifted to a ~~previous user~~ an interface element

previous in order in the current group if the current
group is the same as the target group, or

input focus is shifted to a ~~last user~~ an interface element last
in order in the target group if the current group is not
the same as the target group.

14. (Original) The product of claim 13, wherein instructions to detect
an ensemble comprise instructions to:

detect a sequence of one or more characters that uniquely identifies an
activation user interface element.

15. (Currently Amended) The product of claim 14, wherein the
sequence of one or more characters is a sequence of identical group identifier
characters ~~identifiers~~.

16. (Currently Amended) The product of claim 13, wherein instructions
to detect an ensemble comprise instructions to:

detect one or more sequential user activation inputs ~~key presses~~ entered
by a user within a time threshold.

17. (Currently Amended) The product of claim 13, wherein:

the pressing and releasing of an activation modifier key delimits the user
activation inputs ~~key presses~~ in the ensemble.

18. (Currently Amended) A computer implemented method for
navigating user interface elements on a display screen ~~of a computer program~~
~~application,~~
the interface elements being arranged in order into user interface element groups
having assigned group identifier characters; and
the interface elements indicating, on the display screen, an element currently
having focus to receive user input, the method comprising:

detecting a user navigation input comprising one of ~~key press of a~~
~~navigation key, the navigation key having a group identifier, the~~
~~navigation key being a forward~~ user navigation input key or a
backward user navigation input key, the forward user navigation
input comprises a forward modifier key press combined with a key
press of a first group identifier character and the backward user
navigation input comprises a backward modifier key press
combined with a key press of a second group identifier character;

identifying a selected group of user interface elements associated with the
first or second group identifier character; and

shifting input focus to a user interface element in the selected group based

on the user navigation input key[[,]]:

wherein, when the user navigation input key is detected pressed, :

determining a current group and a target group of user

interface elements is determined, that contains the

interface element currently having input focus, and

determining a target group that corresponds to the group

identifier key press:

wherein when the user navigation input key is the forward user navigation

input key, :

input focus is shifted to a next user an interface element next

in order in the current group if the current group is the

same as the target group, or

input focus is shifted to a first user interface element in the

target group if the current group is not the same as

the target group, and

wherein when the user navigation input key is the backward user

navigation input key:

input focus is shifted to a previous user an interface element

previous in order in the current group if the current

group is the same as the target group, or

input focus is shifted to a ~~last user~~ an interface element last
in order in the target group if the current group is not
the same as the target group.

19. (Currently Amended) The method of claim 18, wherein:
the user navigation input key is ~~[[a]] the forward~~ user navigation input key
or ~~[[a]] the backward~~ user navigation input key; and
shifting input focus to a user interface element comprises:

shifting input focus to a next in order user interface element
in the selected group if the user navigation input key
is ~~[[a]] the forward~~ user navigation input key, and
shifting input focus to a previous in order user interface
element in the selected group if the user navigation
input key is ~~[[a]] the backward~~ user navigation input
key.

20. (Currently Amended) The method of claim 18, wherein the user
interface elements have associated text labels, and wherein the user interface
elements associated with the group identifier character are user interface
elements having an associated text label with a first character that matches the
group identifier character.

21. (Original) The method of claim 18, wherein the user interface elements have associated text labels, the method further comprising:
grouping the user interface elements into groups based on the first character of the associated text label of the elements at application run time.

22. (Currently Amended) The method of claim 18, wherein:
the forward user navigation input key is a combination of one or more forward modifier keys and the first group identifier character key;
and
the backward user navigation input key is a combination of one or more backward modifier keys and the second group identifier character key.

23. (Currently Amended) A computer implemented method, for a software application having user interface elements on a display screen of a computer program application,
the interface elements being arranged in order into user interface element groups having assigned group identifier characters; and
the interface elements indicating, on the display screen, an element currently having focus to receive user input, the method comprising:

detecting a sequence of one or more user navigation inputs ~~key presses~~
~~of navigation keys, each navigation key having a group identifier,~~
each user navigation input comprising one of key ~~being~~ a forward
user navigation input key or a backward user navigation input key,
the forward user navigation input comprises a forward modifier key
press combined with a key press of a first group identifier character
and the backward user navigation input comprises a backward
modifier key press combined with a key press of a second group
identifier character;

generating a navigation string from the sequence of one or more group
identifiers identifier characters for the one or more user navigation
inputs ~~keys~~; and

shifting input focus to a user interface element identified by the navigation
string[[,]];

wherein, when the user navigation input key is detected pressed, :

determining a current group and a target group of user-
interface elements is determined, that contains the
interface element currently having input focus, and
determining a target group that corresponds to the group
identifier key press;

wherein when the user navigation input key is the forward user navigation

input key, :

input focus is shifted to a ~~next user~~ an interface element next

in order in the current group if the current group is the

same as the target group, or

input focus is shifted to a first ~~user~~ interface element in the

target group if the current group is not the same as

the target group, and

wherein when the user navigation input key is the backward user

navigation input key,:

input focus is shifted to a ~~previous user~~ an interface element

previous in order in the current group if the current

group is the same as the target group, or

input focus is shifted to a ~~last user~~ an interface element last

in order in the target group if the current group is not

the same as the target group.

24. (Currently Amended) The method of claim 23, wherein detecting a sequence of one or more user navigation inputs ~~key presses~~ comprises:

detecting a sequence of forward user navigation inputs ~~key presses~~, the
sequence having a first user navigation input ~~key press~~ and a last
user navigation input ~~key press~~;
initializing the navigation string when the first user navigation input ~~key~~
~~press~~ is detected;
starting a time out interval with each forward user navigation input ~~key~~
~~press~~; and
determining the last user navigation input ~~key press~~ as the input ~~key press~~
after which no forward user navigation inputs ~~key presses~~ are
detected within the time out interval.

25. (Currently Amended) The method of claim 23, wherein detecting a
sequence of one or more user navigation inputs ~~key presses~~ comprises:

detecting a sequence of backward user navigation inputs ~~key presses~~, the
sequence having a first user navigation input ~~key press~~ and a last
user navigation input ~~key press~~;
initializing the navigation string when the first user navigation input ~~key~~
~~press~~ is detected;
starting a time out interval with each backward navigation key press; and
determining the last navigation key press as the key press after which no
backward navigation key presses are detected within the time out
interval.

26. (Currently Amended) The method of claim 23, wherein the user interface elements have an order, and shifting input focus to a user interface element comprises:

if the user navigation input key is [[a]] the forward user navigation input key, shifting input focus to a next in order user interface element having a text label starting with the same characters as the characters in the navigation string; and

if the user navigation input key is [[a]] the backward user navigation input key, shifting input focus to a previous in order user interface element having a text label starting with the same characters as the characters in the navigation string.

27. (Currently Amended) A computer implemented method providing activation keys for user interface elements on a display screen, ~~of a computer-program application~~

the interface elements being arranged in order into user interface element groups having assigned group identifier characters; and

the interface elements indicating, on the display screen, an element currently having focus to receive user input, the method comprising:

detecting an ensemble of sequential user activation inputs key presses,
each user activation input key comprising a character, thereby
detecting a sequence of characters, each user activation input

comprising one of key being a forward user activation input key or a backward user activation input key, the forward user activation input comprises a forward activation modifier key press combined with a key press of a first group identifier character and the backward user activation input comprises a backward activation modifier key press combined with a key press of a second group identifier character;

identifying a matching activation user interface element by finding an activation user interface element having a label matching the sequence of characters; and

performing an action associated with the matching activation user interface element[[,]];

wherein, when the ~~navigation~~ user activation input key is detected pressed, ;

determining a current group and a target group of user interface elements is determined, that contains the interface element currently having input focus, and determining a target group that corresponds to the group identifier key press;

wherein when the ~~navigation~~ user activation input key is the forward ~~navigation user activation input key, ;~~

input focus is shifted to ~~a next user~~ an interface element next
in order in the current group if the current group is the
same as the target group, or

input focus is shifted to a first ~~user~~ interface element in the
target group if the current group is not the same as
the target group, and

wherein when the ~~navigation~~ user activation input key is the backward
~~navigation~~ user activation input key;

input focus is shifted to ~~a previous user~~ an interface element
previous in order in the current group if the current
group is the same as the target group, or

input focus is shifted to ~~a last user~~ an interface element last
in order in the target group if the current group is not
the same as the target group.

28. (Original) The method of claim 27, wherein detecting an ensemble
comprises:

detecting a sequence of one or more characters that uniquely identifies an
activation user interface element.

29. (Currently Amended) The method of claim 28, wherein the sequence of one or more characters is a sequence of identical group ~~identifiers~~ identifier characters.

30. (Currently Amended) The method of claim 27, wherein detecting an ensemble comprises:

detecting one or more sequential user activation inputs ~~key-presses~~
entered by a user within a time threshold.

31. (Currently Amended) The method of claim 27, wherein:
the pressing and releasing of an activation modifier key delimits the user
activation inputs ~~key-presses~~ in the ensemble.

32. (New) The product of claim 1, wherein, if there is no current group, the target group is deemed to be different from the current group and input focus is shifted to a first user interface element in the target group.

33. (New) The product of claim 9, wherein, if there is no current group, the target group is deemed to be different from the current group and input focus is shifted to a first user interface element in the target group.

34. (New) The product of claim 13, wherein, if there is no current group, the target group is deemed to be different from the current group and input focus is shifted to a first user interface element in the target group.

35. (New) The method of claim 18, wherein, if there is no current group, the target group is deemed to be different from the current group and input focus is shifted to a first user interface element in the target group.

36. (New) The method of claim 23, wherein, if there is no current group, the target group is deemed to be different from the current group and input focus is shifted to a first user interface element in the target group.

37. (New) The method of claim 27, wherein, if there is no current group, the target group is deemed to be different from the current group and input focus is shifted to a first user interface element in the target group.